Publication Number	Assignee	In vitro	In vivo	Compo- sition	Method of making	Use/ diagnostic use	Cell type	Tissue of origin	Therapy	Device
US6090782	Pro-Neuron, Inc.	X	X			X	X hematopoietic		X	
US 5599703	The United States of America as represented by the Secretary of the Navy	X	X		X Isolation and coculturing		X human bone marrow CD34.sup.+ stem and progenitor cells, including primitive stem cells	X Bone marrow	X method of engrafting human bone marrow CD34.sup.+ stem and progenitor cells in a human	
US 5610056	Amgen Inc. Tosoh Corporation	X	X		X proliferation and differentiation of said hematopoietic cells		X hematopoietic cells		X method for producing erythroid cells for hematopoietic cell transplantation in a subject	
US5807744	Boehringer Mannheim GmbH	X	X		X		X bone marrow cells		Х	
US5942496	The Regent of The University of Michigan	X	X		X		X bone progenitor cells	X bone progenitor tissue	Х	
US 5981165	NeuroSpheres Holdings Ltd.	X	X		X		X multipotent neural stem cell	X juvenile or adult neural tissue	Х	
US 5981211	Regents of the University of Minnesota	X	X		X		X bone marrow stem cells	X bone marrow	X	
US5997865"	Brian D. Bennett et al.	X	X		X		X hematopoietic		X	
US6022540"	Osiris Therapeutics, Inc.	X	X		X		X mesenchymal stem cell		Х	
US6022848	Pro-Neuron, Inc.	X	X		X		X hematopoietic		X	
US 6066318	G. D. Searle & Co.	X	X		X		X hematopoietic stem cells		X	_
US 6143293	Carnegie Mellon University of Pittsburgh	X	X	X	X		X mesenchymal stem cells		X	
US6165783	NeuroSpheres Holdings Ltd.	X	X		X		X multipotent neural stem cells		Х	
US 5665350	University of Massachusetts Medical Center	X	X				X pluripotent hematopoietic stem cells		X Cell transplantation	

Publication Number	Assignee	In vitro	In vivo	Compo- sition	Method of making	Use/ diagnostic use	Cell type	Tissue of origin	Therapy	Device
US5869039	Institut National de la Sante et de la Recherche Medicale	X	X				X hematopoietic stem cells		X	
US5911983	University of Pittsburgh	X	X	X			X hematopoietic progenitor cell		X	
US6060052	Systemix, Inc.	X	X				X hematopoietic stem cells		X	
US 5697901	APPLIED TISSUE TECHNOLOGIES, LLC, WELLESLEY HILLS, MA	X	X		X method for introducing genetic material into a cell with a microneedle				X method for delivering genetic material into a human or non-human subject by introducing genetic material into a cell with a microneedle	
US 5656724	Repligen Corporation	X	x						X method for protecting myeloid progenitor cells from chemotherapeutic agents and radiation used by administering IL	
US6146623	Nexell Therapeutics, Inc.	X	X		X	X	X neutrophil progenitor cells			
US5981830	Schering Aktiengesellschaft Washington University	X	X	X transgenic mouse		X transgenic mouse	X embryonic stem			
US6149902	Yale University	X	X			X	X precursor cell			
US 5783566	California Institute of Technology, Pasadena, CA	X	X		X method for administering genetic material to cells		X hematopoietic progenitor cells			
US5906984	Arizona Board of Regents on behalf of The University of Arizona U.S. Bioscience	X	X		X		X hematopoietic progenitor cells			
US5928947	California Institute of Technology	X	X		X		X neural crest stem cell			

Publication Number	Assignee	In vitro	In vivo	Compo- sition	Method of making	Use/ diagnostic use	Cell type	Tissue of origin	Therapy	Device
US5942435	The Board of Trustees of the University of Illinois Biotechnology Research and Development Corp.	X	Х	X embryonic stem cell	X		X embryonic stem cell			
US 5591717	The Ohio State Research Foundation	X	X				X erythrocyte progenitor cells and lymphocyte progenitor cells			
US5830462	President & Fellows of Harvard College Board of Trustees of Leland S. Stanford, Jr. University	X	X		X					
US 5637323	The United States of America as represented by the Department of Health and Human Services		X		X method of isolating		X hematopoietic stem cells	blood	X method of transplanting an increased number of hematopoietic stem cells AND method of improving engraftment of a peripheral blood leukocyte transplant	
US5928638	Systemix, Inc.		X		X		X hematopoietic		X	
US5977181	Cold Spring Harbor Laboratory		X		X		X of hematopoietic stem cells		X	
US 5614187	The General Hospital Corporation The United States of America as represented by the Department of Health and Human Services		X				X hematopoietic stem cells		X providing said recipient with a cell - recipient species bone marrow hematopoietic stem cells having inserted therein DNA encoding an antigen to inhibit immune response after transplantation	

Publication Number	Assignee	In vitro	In vivo	Compo- sition	Method of making	Use/ diagnostic use	Cell type	Tissue of origin	Therapy	Device
US 5635156	University of Pittsburgh		Х				X hematopoietic stem cell		X method for conditioning a recipient for bone marrow transplantation	
US 5649904	Sandoz Ltd. Instituto Nazionale Per Lo Studio E La Cura Dei Tumori		X				X haemopoietic progenitor cell		X	
US 5655546	Alan A. Halpern		X				X Mesenchymal cell	X BONE MARROW	X method for repairing a defect in cartilage	
US 5662895	Sloan-Kettering Institute		X				X hematopoietic progenitor cells		X enhancing hematopoietic recovery in: allogeneic or autologous bone marrow progenitor cell transplantation or treating or preventing neutropenia in patients by administering a therapeutically effective dose of purified pluripotent CSF	

Publication Number	Assignee	In vitro	In vivo	Compo- sition	Method of making	Use/ diagnostic use	Cell type	Tissue of origin	Therapy	Device
US 5695755	Thalia Paoayannopulou		x				X hematopoietic stem cells		X Peripheralizing hematopoietic stem cells by administering an anti-VLA-4 antibody, collecting peripheral blood, enriching the cells using antibodies, administer chemotherapy to the patient, return the enriched cells to the blood.	
US 5728377	Board of Regents, The University of Texas System (Austin, TX); Indiana University Foundation (Bloomington, IN); Sloan-Kettering Institute for Cancer Research (New York, NY)		X				X hematopoietic progenitor cells		X improved method for chemotherapy of a cancer patient employing an antineoplastic agent having bone marrow toxicity, by treating patient with a hematopoietic progenitor cell inhibitory amount of IP-10	
US 5733542	Osiris Therapeutics, Inc. Baltimore, Maryland		X				X mesenchymal stem cells		X bone marrow engraftment	

Publication Number	Assignee	In vitro	In vivo	Compo- sition	Method of making	Use/ diagnostic use	Cell type	Tissue of origin	Therapy	Device
US 5760012	Thomas Jefferson University		X				X hematopoietic stem cell		X method of repairing a mutation in a hepatocyte of a human subject, which comprises removing a hepatocyte from a subject, having a disease caused by the presence of a CRV-repairable mutation in the hepatocyte, and introducing a nucleic acid into the removed cell	
US 5762926	The Regents of the University of California		X				X Bone marrow cells, stem cells		X method for treating defective, diseased or damaged cells in the mammalian central nervous system comprising grafting genetically modified donor cells into the central nervous system of a subject	

Publication	Assignee	In vitro	In vivo	Compo-	Method of making	Use/	Cell type	Tissue of	Therapy	Device
Number				sition		diagnostic		origin		
						use				
US 5763416	The Regent of the		X				X bone progenitor	X bone	X Method of repairing	X
	University of Michigan						cells	progentor	a tissue site by	osteotropi
								tissue	transferring an an	c device,
									osteotropic gene in	comprisin
									association with a	g an
									structural bone-	osteotropi
									compatible matrix to	c gene
									bone progenitor cells	capable of
									located within a bone	expression
									progenitor tissue site	in bone
									of an animal where	progenitor
									nucleic acid segment	cells, the
									transfers into said cells	gene
										associated
										with an
										amount of
										a
										structural
										bone-
										compatibl
										e matrix
										effective
										to absorb
										said gene
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Publication Number	Assignee	In vitro	In vivo	Compo- sition	Method of making	Use/ diagnostic use	Cell type	Tissue of origin	Therapy	Device
US 5773460	Universite De Montreal, Montreal, CA		X				X Stem cell of bone marrow	X Bone marrow	X photodynamic therapy of a patient suffering from leukemias, disseminated multiple myelomas or lymphomas by harvesting pateint's bone marrow; treating with radiation and performing autologous stem cell transplantation using the purged bone marrow	
US 5788976	WBK, Inc., Diablo, CA		X				X Bone stem cell		X method for promoting new bone growth in a patient in need of bone repair of a bone defect site by recovering a portion of the cancellous bone of said patient in finely divided form together with all constituent components thereof including blood, marrow and bone stem cell elements	
US5800539	Emory University		X				X bone marrow cells		X	
US5806529	Yeda Research and Development Co. Ltd.		X				X T-cell-depleted stem cells		X	

Publication	Assignee	In vitro	In vivo	Compo-	Method of making		Cell type	Tissue of	Therapy	Device
Number				sition		diagnostic		origin		
						use				
US5811089	Centr Embrionainikh		X				X of human		X	
	Tkaney "Emcell"						hematopoietic liver			
							cells, human			
							hematopoietic spleen			
							cells			
US5811094	Osiris Therapeutics, Inc.		X				X human	X Bone	X	
							mesenchymal stem	marrow		
							cells			
US5817773	New York University Sloan-		X				X hematopoietic		X	
1	Kettering Institute for Cancer Research						progenitor cells			
I	Cancer Nesearch									
US 5824297	Oncogene Science, Inc.		X				X Epwthelial stem		X	
							cell			
US 5824304	Thalia Paoayannopulou		X				X		Х	
							HEMATOPOEITIC			
							STEM CELL			
US5830859	Ossacur AG		X				X bone stem cells		X	
US 5842477	Advanced Tissue		X				X mesenchymal		X	
	Sciences, Inc.						stem cells			
US5843423	Immunex Corporation		X				X hemapoeitic stem		X	
							or progenitor cells			
US5846529	Nexell Therapeutics, Inc.		X				X neutrophil		X	
							precursors			
US 5858347	G. D. Searle & Co.		X				X hematopoietic		X	
							cells			
US5858963	BioTransplant, Inc.		X				X porcine bone		X	
							marrow cells			
US 5871724	O.S.I. Pharmaceuticals Inc.		X				X hematopoietic		X	
							progenitor cells			
US 5871767	Brown University Research Foundation		X				X neural stem cells		X	
****			**				**		**	
US5876692	The University of Pittsburgh		X				X hematopoietic		X	
********	The Company Harristel		**				stem cells		**	
US5876708	The General Hospital Corporation		X				X hematopoietic		X	
***********	•		**				stem cells	** 5	**	
US5880090	The Hope Heart Institute		X				X endothelial	X Bone	X	
							progenitors	marrow		

US 5888983 Thoi Univ US 5891724 Que King US5906934 Morp Phai	mas Jefferson versity een's University at gston	X	sition		diagnostic use		origin		
US 5888983 Thoi Univ US 5891724 Que King US5906934 Morp Phai	omas Jefferson versity een's University at								
US 5891724 Que King US 5906934 Morr Phair	versity een's University at	X				X human neutrophil		X	
Univ US 5891724 Que King US5906934 Morr	versity een's University at	X				precursor cells			
Univ US 5891724 Que King US5906934 Morr	een's University at					X hematopoietic		X	
US5906934 Morp Phar						stem cell			
US5906934 Morp Pha	gston	X				X hematopoietic		X	
Pha						stem cell			
	rphogen armaceuticals, Inc.	X				X isolated		X	
Nort	th Shore University					mesenchymal stem			
	spital Research					cells			
Corp	poration								
US5914108 Syst	temix, Inc.	X				X hematopoietic		X	
						stem cell			
	dasit Medical Research	X				X autologous stem		X	
Serv Ltd.	vices and Development					cell			
	an-Kettering Institute for	X				X STEM CELL		X	
	ncer Research	74				A STEW CEEE		74	
US 5939456 Ttru	ustees of Boston	X				X erythroid or		X	
	iversity	11				myeloid progenitor			
	1. Olding					cells			
US5948426 Stev	ven R. Jefferies	X				X mammalian stem		X	X
						cells			
US5955432 Terra	rapin Technologies, Inc.	X				X hematopoietic		X	
						progenitor cells			
US 5965564 Cell	I Therapeutics, Inc.	X				X hematopoietic		X	
						stem cells			
US5980885 Neu	uroSpheres Holdings	X				X transplanting		X	
Liu.						multipotent neural			
						stem cell			
000001	Elizabeth's Medical nter of Boston	X				X endothelial		X	
	General Hospital	37	-		1	progenitor cell		37	
	poration	X				X hematopoietic stem cells		X	
· ·	ris Therapeutics, Inc.	X	1	+	-	X mesenchymal		X	
030010030	Horapouloo, mo.	Λ				stem cells and (ii)		A	
						hematopoietic			
						progenitor cells			

Publication Number	Assignee	In vitro	In vivo	Compo- sition	Method of making	Use/ diagnostic use	Cell type	Tissue of origin	Therapy	Device
US6013067	ZymoGenetics, Inc.		Х				X bone marrow cells or peripheral blood stem cells	X bone marrow cells or peripheral blood stem cells		
US6015554	Systemix, Inc.		X				X human hematopoietic progenitor cells		X	
US6017527	Immunex Corporation		X				X hematopoietic stem or progenitor cells		Х	
US6060049"	Ximerex, Inc.		X				X lymphocytic progenitor cells		Х	
US6096731	Institute for Drug Research, Inc.		X				X hematopoietic cell		X	
US6117850	The Collaborative Group, Ltd.		X				X peripheral blood precursor cells		Х	
US6165785	University of Cincinnati Shriners Hospitals for Children		X				X stem cells		X	
US 5514364	University of Pittsburgh		X						X Combination of bone marrow transplantation with radiation	
US 5633234	The Johns Hopkins University		X						X method of treatment for a cancer patient after resection of a neoplastic tumor by administering to said patient said stem cells containing said chimeric DNA segment	

Publication Number	Assignee	In vitro	In vivo	Compo- sition	Use/ diagnostic use	Cell type	Tissue of origin	Therapy	Device
US 5650148	The Regents of the University of California		X					X method for treating defective, diseased or damaged cells in the mammalian central nervous system by grafting genetically modified donor cells	
US 5674843	Celtrix Pharmaceuticals, Inc.		X					X method for increasing the numbers of circulating stem cells in a subject by administering TGF.beta1; drawing peripheral blood; removing stem cells from the blood; and after the myelosuppressive therapy, administering the stem cell to the recipient	
US 5843435	Hadasit Medical Research Services and Development Ltd. Baxter International Inc.		X					X	
US5942222	The Rockefeller University		X					X	

Publication Number	Assignee	In vitro	In vivo	Compo- sition	Method of making	Use/ diagnostic	Cell type	Tissue of origin	Therapy	Device
1 (4111001						use		011g		
US6018096	Surrogen, Inc.		X	X	X	X MAKE	X human			
				chimeric,		chimeric,	hematopoietic stem			
				non-		non-	cells			
				human,		human,				
				genetically		genetically				
				immunoco		immunoco				
				mpetent		mpetent				
				mammal		mammal				
US 5574205	Cell Genesys, Inc.		X			X Making	X embryonic stem			
02 007.200						a	cells			
						genetically				
						engineere				
						d mouse				
						by				
						transfectin				
						g				
						embryonic				
						stem cells				
						and				
						determinin				
						g the				
						effectiven				
						ess of a				
						therapeuti				
						c agent in				
						preventing				
						transplant				
						rejection				
						in that				
						mouse				

Publication Number	Assignee	In vitro	In vivo	Compo- sition	Use/ diagnostic use	Cell type	Tissue of origin	Therapy	Device
US 5650550	The United States of America as represented by the Department of Health and Human Services		Х	X murine embryonic stem cell	X	X murine embryonic stem cell			
US 5675059	The Ontario Cancer Institute		X	X	X A mutant mouse comprisin g disrupted alleles of the IRF-2 gene, the disruption being introduced into the mouse or an ancestor of the mouse at an embryonic stage using an embryonic stem cell line				
US 5684222	Ontario Cancer Institute		X	X embryonic stem cell	X Mutant mouse	X embryonic stem cell			

Publication Number	Assignee	In vitro	In vivo	Compo- sition	Method of making	diagnostic	Cell type	Tissue of origin	Therapy	Device
US 5698765	The Ontario Cancer Institute		X	X Embryoni c stem cell line		X Mutant mouse	X Embryonic stem cell line			
US 5698766	The Regents of the University of California		X			X Mutant mouse	X embryonic stem cell			
US 5714667	Amgen Canada Inc.		X			X Mutant mouse	X Embryonic cell			
US 5750825	Chugai Seiyaku Kabushiki Kaisha, Tokyo, JP		X			X genetically engineere d mouse having a disrupted endothelin e-1 gene by rendering the endothelin e-1 gene contained in the genome of the embryonic stem cells defective				
US 5750826	Merck & Co., Inc.		X			X transgenic mouse	X embryonic stem cells			

Baylor College of Medicine Jean-Pierre Julien		X			diagnostic		origin		
		X			use	**			
Jean-Pierre Julien					X	X intestinal			
Jean-Pierre Julien						epithelial progenitor			
Jean-Pierre Julien						cells			
		X			X	X mouse embryonic			
						stem cells			
BASF Aktiengesellschaft		X			X a	X embryonic stem			
					transgenic	cells			
					mouse				
Ortho Pharmaceutical		X	X		X	X embryonic stem			
Corp.			transgenic		transgenic	cells			
			_		_				
HSC Research		X	X			X human			
Development Corporation			chimeric		_				
			mouse		mouse	cells			
Johns Hopkins University		X	X		X	X embryonic stem			
School of Medicine			transgenic		transgenic	cell			
			_		mouse				
Ortho Pharmaceutical		X	ΧA		X	X embryonic stem			
Corp.			transgenic		transgenic				
			mouse		mouse				
The University of British		X	ΧA		X	X embryonic stem			
Columbia			transgenic			cells			
			mouse						
Johns Hopkins University		X	ХА		ХА	X mouse embryonic			
School of Medicine			transgenic		transgenic				
					_				
The Regents of the		X				X mouse embryonic			
University of California									
			_						
Board of Trustees of Leland Stanford Jr. University President and Fellows of Harvard College		Х			X	X STEM CELL			
	Ortho Pharmaceutical Corp. HSC Research Development Corporation Johns Hopkins University School of Medicine Ortho Pharmaceutical Corp. The University of British Columbia Johns Hopkins University School of Medicine The Regents of the University of California Board of Trustees of Leland Stanford Jr. University President and	Ortho Pharmaceutical Corp. HSC Research Development Corporation Johns Hopkins University School of Medicine Ortho Pharmaceutical Corp. The University of British Columbia Johns Hopkins University School of Medicine The Regents of the University of California Board of Trustees of Leland Stanford Jr. University President and	Ortho Pharmaceutical Corp. HSC Research Development Corporation Johns Hopkins University School of Medicine Ortho Pharmaceutical Corp. The University of British Columbia Johns Hopkins University School of Medicine X X X X Board of Trustees of Leland Stanford Jr. University President and	Ortho Pharmaceutical Corp. HSC Research Development Corporation Johns Hopkins University School of Medicine Ortho Pharmaceutical Corp. The University of British Columbia The Regents of the University of California Board of Trustees of Leland Stanford Jr. University President and	Ortho Pharmaceutical Corp. We transgenic mouse HSC Research Development Corporation Johns Hopkins University School of Medicine Ortho Pharmaceutical Corp. The University of British Columbia The University School of Medicine The Regents of the University of California Board of Trustees of Leland Stanford Jr. University President and	Ortho Pharmaceutical Corp. Ortho Pharmaceutical Corp. Itransgenic mouse HSC Research Development Corporation Johns Hopkins University School of Medicine Ortho Pharmaceutical Corp. Itransgenic mouse X X X X X X X X X X X X X	Ortho Pharmaceutical Corp. X X X X X Embryonic stem transgenic mouse HSC Research Development Corporation System of Pharmaceutical Corp. X X X X X Embryonic stem transgenic mouse HSC Research Development Corporation X X X X Making A chimeric mouse System of Medicine Transgenic mouse Ortho Pharmaceutical Corp. Ortho Pharmaceutical Corp. X X X X X X Embryonic stem transgenic mouse The University of British Columbia The University of British Columbia The Regents of the University of California The Regents of the University of California The Regents of the University of California Transgenic mouse The Regents of the University of California Transgenic mouse The Regents of Trustees of Leland Stanford Jr. University President and	Ortho Pharmaceutical Corp. Itransgenic mouse HSC Research Development Corporation Johns Hopkins University Corp. The University of British Columbia Johns Hopkins University School of Medicine The Regents of the University School of Medicine Johns Hopkins University Stansgenic mouse Johns Hopkins University Stansgenic mouse The University of British Columbia The Regents of the University of California The Regents of the University of California The Regents of the University of California Board of Trustees of Leland Stanford Jr. University President and	Ortho Pharmaceutical Corp. Itransgenic mouse HSC Research Development Corporation Johns Hopkins University School of Medicine The University of British Columbia Johns Hopkins University School of Medicine The University of Medicine The Regents of the University of California The Regents of the University of California The Regents of Leiand Stanford Jr. University of California Dortho Pharmaceutical Stanford Jr. Stanford

Publication Number	Assignee	In vitro	In vivo	Compo- sition	Method of making	Use/ diagnostic use	Cell type	Tissue of origin	Therapy	Device
US 6028244	California Institute of Technology		X			X producing a transgenic	X embryonic stem cell			
US 6054436	Board of Trustees of Leland S. Stanford Jr. Univ. President & Fellows of Harvard College		X			mouse X	X STEM CELL OR PROGENITOR CELL			
US 6066778	The Regents of the University of Michigan		X			X transgenic mouse	X embryonic stem cell			
US6075181	Abgenix, Inc.		X			X transgenic mouse	X embryonic stem cell			
US6077990	Ortho-McNeil Pharmaceutical, Inc.		X			X transgenic mouse	X mouse embryonic stem cell			
US 6080910	Case Western Reserve University		X			X transgenic mouse	X embryonic stem cell			
US 6080911	Ohio University		X			X transgenic mouse	X mouse embryonic stem cell			
US 6100444	University of Rochester Medical Center		X			X transgenic mouse	X embryonic stem cell			
US6100445	BASF Aktiengesellschaft		X			X transgenic mouse	X mouse embryonic stem cell			
US 6127598	The Regents of the University of California		X			X transgenic mouse	X embryonic stem cell			
US 6133503"	The Regents of the University of California		X			X	X embryonic stem cell			
US6136040	Washington University		X			X	X embryonic stem cell			

Publication Number	Assignee	In vitro	In vivo	Compo- sition	Method of making	Use/ diagnostic use	Cell type	Tissue of origin	Therapy	Device
US 6147275	Research Development Foundation		X			X transgenic mouse	X embryonic stem cells			
US6162963	Abgenix, Inc.		X	X		X transgenic mouse	X mouse embryonic stem cell			
US6166289	Ortho-McNeil Pharmacuetical, Inc.		X			X transgenic mouse	X mouse embryonic stem cell			
US 5605822	The Regents of The University of Michigan		X Ex- vivo		X proliferation, expansion, or both, by culturing human hematopoietic cells		X human hematopoietic cells			
US 5635386	The Regents of The University of Michigan		X Ex- vivo		X method for controlling cellular lineage development of hematopoietic cellular system		X Hematopoietic stem cell or progenitor cell; human peripheral blood mononuclear cells, human bone marrow cells, human fetal liver cells, human cord blood cells, human spleen cells			
US 5650147	The Rockefeller University		X		X method of stimulating granulocyte- macrophage progenitor cells by adding cytokine		X granulocyte- macrophage progenitor cells			

Publication Number	Assignee	In vitro	In vivo	Compo- sition	Method of making	Use/ diagnostic use	Cell type	Tissue of origin	Therapy	Device
US 5731490	The Ontario Cancer Institute		Х	X embryonic stem (ES) cell line	X Mutant mouse		X embryonic stem (ES) cell			
US 5777195	The Rockefeller University		X		X Knockout mouse		X Embryonic stem cell			
US 5786340	Baylor College of Medicine		Х		X method for introduction of a nucleic acid cassette into intestinal epithelial progenitor cells		X intestinal epithelial progenitor cells			
US5925568	British Biotech Pharmaceuticals Limited		X		X		X hematopoietic			
US6071889	NeuroSpheres Holdings Ltd.		X		X		X multipotent neural stem cells			
US 5625122	The Ontario Cancer Institute		X	X			X Embryonic stem cell			
US 5674841	Genetics Institute, Inc.		X				X hematopoietic stem cells			
US5792901	The Regents of the University of California		X				X a mouse embryonic stem cell			
US5814300	Cephalon, Inc.		X	X			X embryonic stem cell			
US5932779	Millennium Pharmaceuticals, Inc.		X	X			X embryonic stem cell			
US 5538713	Systemix, Inc.		X		X introducing hemopoeitic stem cells into an implanted bone primordium					
US5843438	Board of Regents University of Washington		X		X					
US 5484770	Hafslund Nycomed Bioreg AS		X							

Publication Number	Assignee	In vitro	In vivo	Compo- sition	Method of making	Use/ diagnostic use	Cell type	Tissue of origin	Therapy	Device
US5798113	Brown University Research Foundation		X							
US5856301	British Biotech Pharmaceuticals Limited		X							
US 5616612	American Cyanamid Company	X			X method of enhancing the growth of bone marrow progenitor cells		X bone marrow progenitor cells		X method of enhancing the growth of bone marrow progenitor cells in a mammal treated with chemotherapeutic agent or exposed to radiation	
US 5736396	Case Western Reserve University	X Ex vivo			X lineage-directed differentiation		X mesenchymal stem cells		X method of treating an individual in need of mesenchymal cells of a particular mesenchymal lineage	
US5837507	The Regents of the University of California Humphries; Keith Sauvageau; Guy	X		X	X		X hematopoietic stern cells		X	
US5843425	The General Hospital Corporation	X		X hematopoi etic stem cells	Х		X hematopoietic stem cells		X	
US5846958	U.S. Bioscience, Inc. Arizona Board of Regents on Behalf of the University of Arizona	X			X		X stimulating hematopoietic progenitor cells		X	
US 6074639	G. D. Searle & Co.	X			X		X STEM CELL		X	

Publication Number	Assignee	In vitro	In vivo	Compo- sition	Method of making	Use/ diagnostic	Cell type	Tissue of origin	Therapy	Device
						use				
US 5670147	Regents of the University of Michigan	X Ex vivo		X ex vivo cell culture compositi on comprisin g human stem cells wherein said human stem cells are rendered mitotic ex vivo		use	X human hematopoietic stem cells or human bone marrow cells		X In an autologous or an allogeneic human bone marrow transplantation, culturing (i) human bone marrow cells or (ii) a cellular composition comprising human hematopoietic stem cell with ex vivo human stem cell division therein,	
US 5672346	Indiana University Foundation	X					X Hematopoietic stem cell		X	
US5834441	Rhone-Poulenc Rorer Pharmaceuticals Inc.	X			X				X	
US 5580724	Board of Regents, The University of Texas System	X			X stimulating fetal cell growth	X analyzing fetal cells for genetic content or abnormalit ies				

Publication	Assignee	In vitro	In vivo	Compo-	Method of making	Use/	Cell type	Tissue of	Therapy	Device
Number				sition		diagnostic		origin		
						use				
US 5677139	President and Fellows of	X				X	X T cell progenitor			
	Harvard College				vitro a monolayer	comparing	cells			
						differentia				
					primate thymic	tion or				
					stromal cells with	growth of				
					primate	the T cell				
					hematopoietic T	progenitor				
					cell progenitor cells					
						descendan				
						ts thereof,				
						exposed to				
						the agent				
						to the				
						differentia				
						tion or				
						growth of				
						control T				
						cell				
						progenitor				
						cells or				
						descendan				
						ts thereof				
						as a				
						determinat				
						ion of the				
						effect of				
						the agent				
				ĺ					1	1

Publication	Assignee	In vitro	In vivo	Compo-	Method of making	Use/	Cell type	Tissue of	Therapy	Device
Number				sition		diagnostic		origin		
						use				
US 5759774	COBE Laboratories, Inc.	X			X Method of	X method	X Stem cell in			
					forming stem cells	of	general			
					bound to a solid	detecting				
					support	in vitro				
						the				
						presence				
						or absence				
						of a ligand				
						in a fluid				
						sample by				
						bringing it				
						into				
						contact				
						with stem				
						cells				
						bound to a				
						solid				
						support				
US5834308	University of Florida	X			X	X	X mammalian			
	Research Foundation, Inc.						pancreatic stem cells			

Publication	Assignee	In vitro	In vivo	Compo-	Method of making	Use/	Cell type	Tissue of	Therapy	Device
Number				sition		diagnostic		origin		
						use				
US 5670372	Vanderbilt University	X					X embryonic stem			
						of	cells			
						screening				
						factors for				
						the ability				
						to promote				
						the				
						formation				
						of				
						embryonic				
						stem cells				
						by				
						combining				
						primordial				
						germ cells				
						with				
						factors				
						and				
						determinin				
						g the				
						formation				
						of				
						embryonic				
						stem cells				

Publication	Assignee	In vitro	In vivo	Compo-	Method of making	Use/	Cell type	Tissue of	Therapy	Device
Number				sition		diagnostic		origin		
						use				
US 5693482	California Institute of	X				X method	X neural crest stern			
	Technology					for	cells			
						assaying				
						the effect				
						of a				
						substance				
						on neural				
						crest stern				
						cells				
US 5741706"	Immusol, Incorporated, San	X					X hematopoietic			
	Diego, CA						stem cell			
						inhibiting				
						the				
						expression				
						of an HIV				
						nucleic				
						acid in an				
						isolated				
						cell				

Publication Number	Assignee	In vitro	In vivo	Compo- sition	Method of making	Use/ diagnostic	Cell type	Tissue of origin	Therapy	Device
						use				
US 5750864	Epitope, Inc.	X					X progenitor cells			
						for	of the plant			
						delaying	_			
						wound-				
						induced				
						ripening				
						of fruit of				
						a fruit-				
						bearing				
						plant,				
						comprisin				
						gtransfor				
						ming				
						progenitor				
						cells of				
						the plant				
US 5763197	Systemix, Inc.	X				V made ad	V hamatanaistia			
03 3/0319/	Systemix, mc.	A				for	X hematopoietic stem cells			
						identifying				
						the	'			
						presence				
						of a				
						growth				
						factor that				
						affects the				
						self-				
						regenerati				
						on of				
						human				
						hematopoi				
						etic stem				
						cells				

Queen's University at (ingston	X	sition		diagnostic				
Queen's University at (ingston	X			uiagnostic		origin		
Queen's University at Cingston	X			use				
ungston		ΧA			X hematopoietic			
		transforma			stem cell			
		nt		preparing				
		cell						
				g culturing				
				a				
				including				
				a				
				vector				
			hematopoi etic stem cell	etic stem cell	etic stem cell resistance- associated protein comprisin g culturing a transforma nt host cell including a recombina nt	etic stem cell resistance- associated protein comprisin g culturing a transforma nt host cell including a recombina nt expression	etic stem cell resistance- associated protein comprisin g culturing a transforma nt host cell including a recombina nt expression	etic stem cell resistance- associated protein comprisin g culturing a transforma nt host cell including a recombina nt expression

Publication Number	Assignee	In vitro	In vivo	Compo- sition	Method of making	Use/ diagnostic	Cell type	Tissue of origin	Therapy	Device
						use				
US 5783383	The Board of Trustees of the Leland Stanford Junior	X				X	X hematopoietic	X Human		
	University					detecting	stem cells	tissue, bone		
						cytomegal		marrow and		
						ovirus		blood		
						(CMV) in				
						a tissue				
						sample				
						including				
						hematopoi				
						etic stem				
						cells				
US5800811	Eepeius	X		X		X MKE	X mesenchymal			
	Biotechnologies					AN	stem cells			
	Corporation					ARTICFI				
	<u> </u>					CIAL				
						SKIN				
US5824084	The Cleveland Clinic	X				X	X connective tissue	X Bone		
	Foundation						progenitor cells	marrow		
							progenitor cens	THAT OW		
US5827740	Osiris Therapeutics, Inc.	X		X		X	X mesenchymal			
				mesenchy			stem cells			
				mal stem						
				cells						
				CCIIS						
US 5858740"	Cell Genesys, Inc.	X		X		X	X hematopoietic			
							stem cells			
US 5874099	Brown University Research	X				X	X NEURAL STEM	1		
25 50, 1077	Foundation	11					CELLS			
US5902741	Advanced Tissue	X		X		X	X mesenchymal			
0.55702741	Sciences, Inc.	21					stem cells			
US5906938	Board of Regents of the	X				X	X hematopoietic			
	University of Washington						- nematopoletic			
	0 144									
US5908784	Case Western Reserve University	X		X		X	X mesenchymal			
	Offiversity						precursor cells			

Publication Number	Assignee	In vitro	In vivo	Compo- sition	Method of making	Use/ diagnostic use	Cell type	Tissue of origin	Therapy	Device
US5912173	The United States of America as represented by the Department of Health and Human Services	X				X	X embryonic stem cells			
US5928945	Advanced Tissue Sciences, Inc.	X				X	X chondrocyte stem cells			X
US5939598	Abgenix, Inc.	X				X a transgenic mouse	X embryonic stem			
US5948428	Stryker Corporation	X				X	X progenitor cell is an osteoblast			X
US5958774	Centre National de la Recherche Scientifique	X		X primitive quiescent hematopoi etic stem cells		X	X primitive quiescent hematopoietic stem cells			
US5965437	Beth Israel Deaconess Medical Center, Inc.	X				X	X quiescent pluripotent hematopoietic progenitor cells			
US5985660	Systemix, Inc.	X				X	X dendritic progenitor cell			
US5994619	University of Massachusetts, A Public Institution of Higher Education of the Commonwealth of Massachusetts, as Represented by its Amherst Campus	X				Х	X ICM progenitor cells from a bovine or porcine preblastocyst stage embryo			
US5994620	The Jackson Laboratory	X				X	X embryonic stem cell			
US6004528	Ivan Bergstein	X				X	X cancer stem line			

Publication Number	Assignee	In vitro	In vivo	Compo- sition	Method of making	Use/ diagnostic use	Cell type	Tissue of origin	Therapy	Device
US 6027744	University of Massachusetts Medical Center The Children's Medical Center Corporation	X		X		X	X neural stem cells			
US6033906	California Institute of Technology	X				X	X mammalian neural stem cell			
US6048964	Stryker Corporation	X				X	X mammalian progenitor cell			
US6093531"	NeuroSpheres Holdings Ltd.	X		X		X	X mammalian multipotent neural stem cell progeny			
US 6139578	Etex Corporation	X				X	X mesenchymal stem cells			
US 5480827	Inoteb	Х		X Solid support containing cultured bone marrow cells (1)	X Method of culturing bone marrow cells on solid support (1)		X bone marrow cells (1)			
US 5523226	Biotechnology Research and Development Corp. Board of Trustees of the University of Illinois	X		X embryonic stem cell obtained from a culture that is capable of forming a tumor in a SCIDS mouse	X obtaining an embryonic stem cell from a culture that is shown to be capable of producing a tumor		X embryonic stem cells			

Publication Number	Assignee	In vitro	Composition	Method of making	Use/ diagnostic use	Cell type	Tissue of origin	Therapy	Device
US 5534423	Regents of the University of Michigan	X		X infecting or transfecting target cells with vectors		X hematopoietic stem cells			
US 5556783	Trustees of Univ. of Penna New York Univ.	X		X Culturing hair follicular stem cells		X hair follicular stem cells			
US 5556954	Beth Israel Hospital Boston Association	X		X Enhancing specific gene expression in hematopoietic stem cells		X hematopoietic stem cells			
US 5580714	Celox Laboratories, Inc.	X		X Method of cryopresering and thawing stem cells; method of using them in therapy		X hematopoietic stem cells, hematopoietic progenitor cells, CD 34+ cells and umbilical cord blood cells			
US 5589369	Cell Genesys Inc. The President and Fellows of Harvard College	X		X method for making mammalian embryonic stem cells which are homozygous for disrupted target loci		X malian embryonic stem cells			
US 5599705	Robert B. Cameron	X		X Isolation, culturing and differentiation		X pluripotent hematopoietic bone marrow stem cells			
US 5605829	Regents of the University of Minnesota	X		X Culturing and differentiation		X hematopoietic cells			
US 5612205	GenPharm International, Incorporated	X		X method for generating a DNA segment inside an embryonic cell		X embryonic cell			

Publication Number	Assignee	In vitro	In vivo	Compo- sition	Method of making	Use/ diagnostic use	Cell type	Tissue of origin	Therapy	Device
US 5612206	Introgene B.V.	X			X method for preparing primate bone marrow cells containing a DNA sequence of interest		X bone marrow cells			
US 5612211	New York University Sloan- Kettering Institute For Cancer Research	X			X culturing		X hematopoietic progenitor cells			
US 5614397	Board of Trustees of the Leland Stanford Junior University	X			X method for increasing the lifespan of a mammalian hematolymphoid cell by using a transgenic hematopoietic stem cell		X hematopoietic stem cell			
US 5631219	Somatogen, Inc.	X			X enhancing growth or differentiation of mammalian progenitor stem cells by administration of hemoglobin.		X erythroid progenitor cells			
US 5635387	CellPro, Inc.	X			X method for increasing the number of human hematopoietic precursor cells		X hematopoietic precursor cells			
US 5639618	Plurion, Inc.	X			X		X pluripotent embryonic stem cell			

Publication Number	Assignee	In vitro	In vivo	Compo- sition	Method of making	Use/ diagnostic use	Cell type	Tissue of origin	Therapy	Device
US 5643741	Systemix, Inc.	X			X method for identifying the presence of human hematopoietic stem cells in a hematopoietic cell sample		X hematopoietic stem cells			
US 5646043	Regents of the University of Michigan	X Ex vivo			X culturing		X hematopoietic stem cell			
US 5654183	California Institute of Technology	X		X isolated cellular compositi on of genetically engineere d mammalia n neural crest stem cells			X neural crest stem cells			
US 5656498	Nippon Telegraph and Telephone Corporation	х			X method for manufacturing freeze-dried blood cells, stem cells, and platelets		X hemopoietic stem cells			
US 5656601	Berlin-Chemie AG	X			X method of stimulating growth of bone marrow stem cells		X bone marrow stem cells			

Publication	Assignee	In vitro	Compo-	Method of making	Use/	Cell type	Tissue of	Therapy	Device
Number			sition		diagnostic		origin		
					use				
US 5658761	Gsf-Forschungszentrum fur	X		X co-culturing		X hematopoietic			
	Umwelt und Gesundheit GmbH			hematopoietic stem		stem cells			
	GIIDH			cells with growth					
				arrested, adherent					
				stromal cells					
US 5665557	Systemix, Inc. The Toronto	X	X	X method of		X hematopoietic			
	Hospital Research Institute		hematopoi	obtaining and		cells enriched for			
			etic cells	expanding a		megakaryocyte			
			enriched	composition		progenitor cells			
			for	substantially					
			megakary	enriched in a					
			ocyte	subpopulation of					
			progenitor	hematopoietic stem					
			cells	cells					

Publication Number	Assignee	In vitro	In vivo	Compo- sition	Method of making	Use/ diagnostic use	Cell type	Tissue of origin	Therapy	Device
US 5670351	The Regents of the University of Michigan	X Ex vivo		human stem cell compositi on in which a substantial			X human hematopoietic stem cells or human bone marrow cells			
US 5672499	California Institute of Technology	X			X immortalizing isolated neural crest stem cells by contacting with an immortalization gene		X neural crest stem cells			
US 5677136	Systemix, Inc.	X			X		X human hematopoietic cells			

Publication Number	Assignee	In vitro	In vivo	Compo- sition	Method of making	Use/ diagnostic use	Cell type	Tissue of origin	Therapy	Device
US 5681559	Systemix, Inc.	X			X method for obtaining a cell population enriched in hematopoietic stem cells using fluorescently labeled antibodies which bind specifically to CD34		X hematopoietic stem cells	X fetal or neonatal cells		
US 5686278	Indiana University Foundation	X		X	X increasing the frequency of transduction of hematopoietic cells by a replication-defective recombinant retrovirus vector		X hematopoietic cells			
US 5700691	Baxter Healthcare Inc., Irvine, CA	X			X Isolation and culturing		X hematopoietic progenitor cells			
US 5721367	Pharming B.V. (Leiden, NL)	X			X method for generating a DNA segment inside an embryonic cell		X embryonic stem cell			
US 5728581	Systemix, Inc.	X			X Expanding hematopoietic stems cells		X hematopoietic stems cells			
US 5733541	The Regent of the University of Michigan	X			X propagating and maintaining the immature morphology of mammalian hematopoietic cells		X hematopoietic cells			

Publication Number	Assignee	In vitro	In vivo Comp sition	- Method o	f making Use/ diagnostic	Cell type	Tissue of origin	Therapy	Device
					use				
US 5733727	Indiana University Foundation	X	X embry stem of havin introd DNA encod a mar gene enabli select of a cardio cyte of lineag from cell lineag result from differ tion o stem of	ng er ng on nyo ll ether es ng ne ntia the	ecting,	X embryonic stem cells			
US 5744347	Ohio University Edison	X	X mu stem o	ine X		X murine stem cells			
US 5744361	Indiana University	X		X		X hematopoietic stem cells			
US 5744442	Bristol Meyers Squibb Company McMaster University	X		X		X erythroid- committed stem cells			

Publication Number	Assignee	In vitro	Compo- sition	Method of making	Use/ diagnostic use	Cell type	Tissue of origin	Therapy	Device
US 5750376	NeuroSpheres Holdings Ltd.	X	X genetically modified neural stem cell	X Making genetically modified neural stem cell		X neural stem cell	X juvenile or adult mammalian neural tissue		
US 5753505	Emory University	X		X		X neuronal progenitor cells	X mammalian brain		
US 5753506	CNS Stem Cell Technology, Inc., Bethesda, MD	X		X		X stem cells of the central nervous system	X central nervous system tissue		
US 5756325	Thomas Jefferson University	X		X method of introducing a predetermined alteration in a target gene of the genome of a cultured cel		X Embryonic stem cell			
US 5759764	Celox Laboratories, Inc.	X		X cryopreserving		X hematopoietic stem or progenitor cells	X umbilical cord blood		
US 5766902	Therexsys Limited, London, GB	X		X Method of delivering a nucleic acid molecule to haematopoietic stem cell by exposing the population of cells to a complex comprising the nucleic acid molecule and a ligand which binds to the target cell		X haematopoietic stem cell			

Publication Number	Assignee	In vitro	In vivo	Compo- sition	Method of making	Use/ diagnostic use	Cell type	Tissue of origin	Therapy	Device
US 5766944	Margaret Eileen Ruiz	X			X process of expanding and differentiating bone marrow-derived stem cells into immunocompetent T cells; process of coculturing		X bone-marrow derived stem cells	X bone- marrow		
US 5766951	Quality Biological, Inc., Gaithersburg, MD	X			X method for growing normal cells from human bone marrow which comprises;		X Bone marrow cells			
US 5767086	Terrapin Technologies, Inc., South San Francisco, CA	X			X method to stimulate the differentiation of bone marrow		X bone marrow			
US 5770414	The Regents of the University of California	X		X	X Transfecting a neuronal progenitor cell with a vector to produce a recombinant retrovirus		X neuronal progenitor cell			

Publication	Assignee	In vitro	In vivo	Compo-	Method of making	Use/	Cell type	Tissue of	Therapy	Device
Number				sition		diagnostic		origin		
						use				
US 5772994	The University of Pittsburgh	X		X	X method for		X hematopoietic			
				compositi	obtaining a cellular		cells			
				on	composition having					
				comprisin	at least about 95%					
				g	mammalian					
				mammalia	hematopoietic					
				n	facilitatory cells					
				hematopoi						
				etic cells						
				with the						
				retention						
				of						
				mammalia						
				n						
				hematopoi						
				etic						
				facilitatory						
				cells						
				which						
				hematopoi						
				etic						
				facilitatory						
				cells are						
				capable of						
				facilitating						
				engraftme						
				nt of bone						
				marrow						
				cells						
US 5773224	Peter Grandics et al.	X			X		X hematopoietic			
							stem cells, fetal cells			
							from the peripheral			
							blood of pregnant			
							women			

Publication Number	Assignee	In vitro	In vivo	Compo- sition	Method of making	Use/ diagnostic use	Cell type	Tissue of origin	Therapy	Device
US 5776773	The Babraham Institute, Cambridge, GB	X			X		X embryonic stem cell			
US 5776781	Systemix, Inc.	X			X method of measuring cells in a sterile environment		X hematopoietic stem cell			X sterile system for measuring at least one property of a sample of cells
US 5780300	Yale University	X			X Expanding and cell proliferation		X hematopoietic precursor cell, epithelial precursor cell, liver precursor cell,			
US 5789215	GenPharm International, San Jose, CA	X			X method for modifying the genome of a target cell		X embryonic stem cell			
US 5792632	Institut Pasteur, Paris, FR	X		X A recombina nt stem cell	X Method of making a recombinant stem cell expressing a polypeptide		X Stem cell			
US5804446	The Picower Institute for Medical Research	X			X		X hematopoietic stem cells			
US5807686	Regents of University of Minnesota Rhone-Poulenc Rorer Pharmaceuticals	X		X	X		X quiescent human hematopoietic stem cells			
US5808008	Sloan-Kettering Institute for Cancer Research	X			X		X hematopoietic progenitor cells			

Publication Number	Assignee	In vitro	In vivo Consiti	ompo- ion	Method of making	Use/ diagnostic use	Cell type	Tissue of origin	Therapy	Device
US5811301	Robert B. Cameron	X			X		X pluripotent hematopoietic stem cells			
US5814440	Systemix, Inc.	X			X		X hematopoietic stem cells			
US5821108	The Board of Trustees of the Leland Stanford Junior University	X			X		X progenitor cells			
US5824489	California Institute of Technology	X			X		X mammalian neural crest stem cells			
US 5824547	Takara Shuzo Co., Ltd.	X			X		X hematopoietic stem cells, peripheral blood stem cells, umbilical blood cells			
US5827735	MorphoGen Pharmaceuticals, Inc.	X	plu t me	rified uripoten esenchy al stem lls	X		X Purified pluripotent mesenchymal stem cells			
US5827742	Beth Israel Deaconess Medical Center, Inc.	X			X		X pluripotent hematopoietic progenitor cells			
US5830651	Signal Pharmaceuticals, Inc.	X	X		X		X pre- oligodendroglial stem cell			
US5830701	Tao Medical Electronics Co., Ltd.	X			X		X hematopoietic progenitor cells			
US5830760	Fred Hutchinson Cancer Research Center	X	etic	matopoi c stem Il line	X		X hematopoietic stem cell line			
US 5834312	Hy-Gene, Inc.	X			X		X BASAL STEM CELL			

Publication Number	Assignee	In vitro		Compo- sition	Method of making	Use/ diagnostic use	Cell type	Tissue of origin	Therapy	Device
US5840580	Becton Dickinson and Company	X	Σ	X	X		X hematopoietic stem cells			
US5843633	Amcell Corporation	X			X		X hematopoietic progenitor cells			
US5843780	Wisconsin Alumni Research Foundation	X	e	X embryonic stem cells	X		X embryonic stem cells			
US5849553	California Institute of Technology	X			X		X neural crest stem cells			
US5851832	Neurospheres, Ltd.	X	Σ	X	X		X multipotent neural stem cells			
US 5858744	Boehringer Mannheim GmbH	X			X		X haematopoietic stem cells			
US5858782	Regents of the University of Michigan	X			X		X hematopoietic progenitor cells			
US5859307	Massachusetts Institute of TechnologyDana Farber Cancer Institute & Tufts University	X	>	X	X		X embryonic stem cells			
US 5861153	Societe L'Oreal S.A.	X		X Skin equivalent	X		X precursors of Langerhans' cells			
US5861313	Ontogeny, Inc.	X			X		X progenitor cells			
US5861315	Amgen Inc. Tosoh Corporation	X			X		X multipotential hematopoietic cells			
US5866115	Klinikum Der Albert- Ludwigs-Universitat Freiburg	X			X		X peripheral blood progenitor cells			
US 5869337	President and Fellows of Harvard College Board of Trustees of Leland S. Stanford Jr. University	X	>	X	X		X PROGENITOR CELL			
US5874266	Cyntellect, Inc.	X			X	 	X hematopoietic			
US 5874308	University of British Columbia	X			X		X HEMOTOPOEITIC	X bone marrow or blood		

Publication Number	Assignee	In vitro	In vivo	Composition	Method of making	Use/ diagnostic use	Cell type	Tissue of origin	Therapy	Device
US5877299	Stemcell Technologies Inc.	X			X		X human hematopoietic progenitor cells			
US5905041	Boehringer Ingelheim International GmbH	X			X		X CD34.sup.+ progenitor cells			
US5905042	University of Massachusetts, A Public Institution of Higher Education of the Commonwealth of Massachusetts, as Represented by its Amherst Campus	X			X		X embryonic			
US5906940	Forschungszentrum Julich GmbH	X			X		X STROMAL CELL			
US5908782	Osiris Therapeutics, Inc.	X		X mesenchy mal stem cells	X		X mesenchymal stem cells			
US 5912174	The Scripps Research Institute	X			X		X pluripotent stem cells OR lymphohematopoieti c stem cells			
US5912175	Hy-Gene, Inc.	X			X		X basal stem cells			
US5912177	Common Services Agency	X			X		X stem cells from peripheral or cord blood	X peripheral or cord blood		X
US5914268	National Jewish Center for Immunology and Respiratory Medicine	X		X	X		X embryonic stem cell			
US 5919997	Cold Spring Habor Labortary Albert Einstein College of Medicine of Yeshiva University	X		X	Х		X mouse embryonic stem cells			
US5922597	Regents of the University of Minnesota	X			X		X hematopoietic			
US5922847	Amgen Inc.	X			X		X hematopoietic			

Publication Number	Assignee	In vitro	In vivo	Compo- sition	Method of making	Use/ diagnostic use	Cell type	Tissue of origin	Therapy	Device
US5945337	Quality Biological, Inc.	X			Х		X CD34.sup.+ cell	X BONE MARROW		
US5948278	BioSeparations, Inc.	X			X		X erythroid progenitor cells			
US 5952224	LaJolla Cancer Research Foundation	X			X		X STEM CELL			
US 5955441	Oklahoma Medical Research Foundation Yale University	X			X		X hematopoietic progenitor cells			
US 5958769	Fred Hutchinson Cancer Research Center	X		X	X		X hematopoietic progenitor cells			
US5962325	Advanced Tissue Sciences, Inc.	X		X	X		X mesenchymal stem cells			
US5965436	Osiris Therapeutics, Inc.	X			X		X mesenchymal stem cells			
US5968829	Cytotherapeutics, Inc.	X		X	X		X human central nervous system (CNS) neural stem cells			
US5972627	Systemix, Inc.	X		Х	X		X human hematopoietic lymphoid and dendritic progenitor cells			
US5985276	GSF-Forschungszentrum fur Umwelt und Gesundheit GmbH	X			X		X STEM CELL			
US 5985656	The Board of Trustees of the Leland Stanford Junior University	X		X	X		X CD34.sup.+ progenitor cells.			
US 5985658	Health Research Incorporated	X			X		X stem progenitor cells			
US6001647	Ixion Biotechnology, Inc.	X			X		X islet producing stem cells			
US6001654	California Institute of Technology	X			X		X neural stem cell			
US6001803	Sloan-Kettering Institute for Cancer Research	X		X	X		X progenitor cells			

Publication Number	Assignee	In vitro	In vivo	Compo- sition	Method of making	Use/ diagnostic use	Cell type	Tissue of origin	Therapy	Device
US6004743	Coulter International Corp	X			X		X hematopoietic stem cells			
US6015671	Indiana University Foundation	X		X embryonic stem cells	X		X embryonic stem cells			
US 6017761	Systemix, Inc.	X			X		X hematopoietic stem cell			
US 6022743	Advanced Tissue Sciences, Inc.	X			X		X pancreatic stem cells			
US6030836	Osiris Therapeutics, Inc.	X		X	X		X human hematopoietic stem cells			
US 6033907	Indiana University Foundation	X			X		X hematopoietic stem cells			
US6037174	Nexell Therapeutics, Inc.	X		X	X		X human hematopoietic precursor cells	X bone marrow, peripheral blood, or cord blood		
US6040180	NeuralStem Biopharmaceuticals, Ltd.	X			X		X multipotential CNS stem cells			
US6043066	Mangano; Joseph A & Buchanan, Linda	X			X		X stem cells			
US 6045818	Massachusetts Institute of Technology	X			X		X STEM CELL			
US 6051146	COBE Laboratories, Inc.	X			X		X STEM CELL			
US6060270	The University of Michigan	X			X		X kidney tubule stem cells			
US 6060317	The United States of America as represented by the Department of Health and Human Services	X			X		X CD34+ stem cells			
US 6063593	University of Southern California University Park Campus	X			X		X mesenchymal stem cells			

Publication Number	Assignee	In vitro	In vivo	Compo- sition	Method of making	Use/ diagnostic	Cell type	Tissue of origin	Therapy	Device
						use				
US6068836	University of	X		X	X		X pluripotent			
	Massachusetts						hematopoietic stem			
							cells			
US 6071422	Cobe Laboratories, Inc.	X			X		X STEM CELL			X
US 6077667	Baylor College of	X			X		X embryonic stem			
	Medicine						cells			
US6077708	Paul C. Collins et al.	X			X		X progenitor cells			
US6083747	Stemcell Therapeutics LLC	X			X		X hematopoietic			
							stem cells			
US 6086900	Board of Regents, The	X			X		X embryonic stem			
	University of Texas Systems						cell			
US6087113	Case Western Reserve	X			X		X human			
	University						mesenchymal stem			
							cells			
US6096540	Becton Dickinson and Company	X			X		X CD34.sup.+ cells			
US 6096717	Jonathan W. Jarvik	X			X		X pleuripotent stem			
	N. C						cells			
US6110739	National Jewish Medical and Research Center	X			X		X embryonic stem cell			
US6114168	Institute National de la Recherche Agronomique Centre National de la	X		X	X		X chicken embryonic stem cells			
	Recherche Scientifique (CNRS) Ecole Normale Superieure de Lyon									
US6117675	HSC Research and Development Limited Partnership	X		X	X		X Retinal stem cells			
US 6124091	Research Corporation Technologies, Inc.	X			X		X hematopoietic stem cells	X blood		
US6127135	Novartis AG	X	1	1	X		X hematopoietic	<u> </u>		
US6129911	Rhode Island Hospital, A LifeSpan Partner	X		X	X		X liver stem cell	X liver tissue		
US 6130089	Julianna Lisziewicz	X			X		X hematopoietic	110000		
							stem cells			

Publication	Assignee	In vitro	In vivo	Compo-	Method of making	Use/	Cell type	Tissue of	Therapy	Device
Number				sition		diagnostic		origin		
						use				
US 6136566	Lexicon Graphics	X		X	X		X embryonic stem			
	Incorporated						cells			
US 6139833	Lexicon Genetics	X		X	X		X embryonic stem			
	Incorporated						cells			
US6147052	KM Biotech, Inc.	X			X		X erythrocyte			
							progenitor cells			
US 6150169	The University of Edinburgh	X			X		X embryonic stem			
							cell			
US 6156493	University of Washington	X			X		X hematopoietic			
							stem cell			
US6159461	Sloan-Kettering Institute for Cancer Research	X			X		X progenitor cells			

Publication Number	Assignee	In vitro	In vivo	Compo- sition	Method of making	Use/ diagnostic use	Cell type	Tissue of origin	Therapy	Device
US 5486359	Osiris Therapeutics, Inc.	X		X isolated, homogene ous population of human mesenchy mal stem cells which can differentia te into cells of more than one connective tissue type such as bone, cartilage, adipose, tendon, ligament, and dermis.			X mesenchymal stem cells (1)	X Bone marrow		
US 5541103	Klinikum der Albert- Ludwigs-Universitat Freiburg	X		X (product by process)			progenitor cells	blood		
US 5589376	California Institute of Technology	X		X Comp. of neural crest stem cells			X neural crest stem cells			

Publication	Assignee	In vitro	In vivo	Compo-	Method of making	Use/	Cell type	Tissue of	Therapy	Device
Number				sition		diagnostic		origin		
						use				
US 5591625	Case Western Reserve	X		X			X human	X marrow		
	University						mesenchymal stem			
							cells			
US 5656479	North Carolina State	X		X			X undifferentiated			
	University						avian cells			
							expressing an			
							embryonic stem cell			
US 5716827	Systemix, Inc.	X		X			X hematopoietic			
				hematopoi			stem cells			
				etic stem						
				cells						
US 5750397	Systemix, Inc.	X		X A			X hematopoietic			
				culture			stem cells			
				and a						
				coculture						
				of						
				hematopoi						
				etic stem						
				cells						

Assignee	In vitro	In vivo	Compo-	Method of making	Use/	Cell type	Tissue of	Therapy	Device
			sition				origin		
					use				
The Regents of the University of Michigan	X					X hematopoietic cells			X bioreactor suitable for culturing human cell and/o tissue, including human stem cells or human hematopo etic cells
	The Regents of the University of Michigan	The Regents of the University of Michigan	The Regents of the X	Sition The Regents of the X	The Regents of the X	The Regents of the X	The Regents of the X X hematopoietic	The Regents of the X X hematopoietic	The Regents of the X X hematopoietic

Publication Number	Assignee	In vitro	In vivo	Compo- sition	Method of making	Use/ diagnostic use	Cell type	Tissue of origin	Therapy	Device
US 5769899	Matrix Biotechnologies, Inc., Melville, NY	X					X mesenchymal stem cells			X bio- absorbable cartilage repair system for regenerati ng damaged or destroyed articular cartilage on a joint surface of a bone comprisin g a bioabsorb ale material and a porous insert containing mesenchy mal stem cells
US 5786323	Amgen Inc., Thousand Oaks, CA and Tosoh Corporation, Tokyo, JP	X		X			X hematopoietic stem cells			
US5814511	Michigan State University	X		X			X human breast epithelial stem cell			
US5830510	North Carolina State University	X		X			X embryonic stem cell			

Publication Number	Assignee	In vitro	In vivo	Compo- sition	Method of making	Use/ diagnostic use	Cell type	Tissue of origin	Therapy	Device
US5854071	Creative BioMolecules, Inc.	X		X			X progenitor cell population			
US5854207	Stryker Corporation	X		X			X the progenitor cell is an osteoblast stimulated to form bone			
US5855619	Case Western Reserve University	X					X mesenchymal stem cells			X
US 5866400	The University of Michigan	X					X hematopoietic stem cells			X
US5874301	National Jewish Center for Immunology and Respiratory Medicine	X		X			X pluripotent precursor cell			
US5876956	Johns Hopkins University School of Medicine	Х		X human pluripoten t hematopoi etic stem cells			X human pluripotent hematopoietic stem cells			
US5879940	Fred Hutchinson Cancer Research Center	X		X			X hematopoietic precursor cells			
US5888807	The Regents of the University of Michigan	X					X human hematopoietic cells			X
US 5916810	Carnegie Mellon University	X					X pleuripotent stem cells			
US5916870	Stryker Corporation	X					X progenitor cell			X
US5942225	Case Western Reserve University Osiris Therapeutics, Inc.	X		X			X human mesenchymal stem cells			
US 5954724	James A. Davidson	X		1			X Stemcell			X
US5955357	Nexell Therapeutics, Inc.	X		X			X neutrophil precursor cells			
US5958767	The Children's Medical Center Corp.	X		X			X neural stem cell			

Publication Number	Assignee	In vitro	In vivo	Compo- sition	Method of making	Use/ diagnostic use	Cell type	Tissue of origin	Therapy	Device
US 5985615	Abgenix, Inc. Japan Tobacco Inc.	X		X			X embryonic stem cell			
US5985659	The Institute of Physical and Chemical Research	X		X			X mouse embryonic stem cell line			
US 5994313	Board of Trustees of the Leland S. Stanford, Jr. University President and Fellows of Harvard College	X					X STEM CEL			
US6028243	The Cleveland Clinic Foundation	X		X			X mouse embryonic stem cell			
US 6030833"	The General Hospital	X		X			X cord blood hematopoietic stem cell, a bone marrow hematopoietic stem cell, a fetal liver hematopoietic stem cell, a neonatal liver hematopoietic stem cell, a fetal spleen hematopoietic stem cell and a neonatal spleen hematopoietic stem cell			
US6049026	The Cleveland Clinic Foundation	X		X composite bone marrow graft			X connective tissue progenitor cells			
US 6051402	Massachusetts Institute of Technology	X		X			X STEM CELL			

Publication	Assignee	In vitro	In vivo	Compo-	Method of making	Use/	Cell type	Tissue of	Therapy	Device
Number				sition		diagnostic		origin		
						use				
US6066317	Genetics Institute, Inc.	X					X hematopoietic			
							progenitor or stem			
							cells			
US 6139835	Cell Genesys, Inc.	X EX		X			X mouse embryonic			
		VIVO					stem cell			
US6146888	The University of Edinburgh	X		X			X STEM CELL			
US 6156569	University of	X		X			X avian primordial			
	Massachusetts Office of Vice Chancellor for						germ cells			
	Research at Amherst									

Publication Number	Assignee	In vitro	In vivo	Compo- sition	Use/ diagnostic use	Cell type	Tissue of origin	Therapy	Device
US 5759766	Fred Hutchinson Cancer	X			X method				
05 3737700	Research Center	71			for				
					diagnos				
					ing a				
					predisposi				
					tion to				
					developin				
					g or				
					suffering				
					from				
					disease				
					associated				
					with				
					allogeneic				
					cellular				
					microchim				
					erism in				
					an				
					individual				
					by				
					isolating				
					and				
					analyzing				
					a sample				
					of cells				
					from the				
					individual				
US5981268	The Board of Trustees of the Leland Stanford Junior University	X			X				

Publication Number	Assignee	In vitro	In vivo	Compo- sition	Method of making	Use/ diagnostic use	Cell type	Tissue of origin	Therapy	Device
US 5565350	Thomas Jefferson University	X			X method of introducing a predetermined alteration in a target sequence of the genome of an embryonic stem cell					
US 5663051	Activated Cell Therapy, Inc.	x			X method of enriching a hematopoietic progenitor CD34.sup.+ cell from cell mixture derived from bone marrow					X Device for enriching a hematopoi etic progenitor CD34.sup. + cell from cell mixture
US 5665380	Micro-Pak, Inc.	X			X method of transmitting a biologically active material to a stem cell in vitro using a liposome or a lipid esicle					
US 5696229	The University of Virginia Patent Foundation, Charlottesville, VA	X			X method of promoting alveolarization, comprising treating stem cells or progenitor cells isolated from lung tissue with a peptide			X Lung tissue		

Publication	Assignee	In vitro	In vivo	Compo-	Method of making		Cell type	Tissue of	Therapy	Device
Number				sition		diagnostic use		origin		
US 5700681	La Jolla Cancer Research Foundation	X			X promoting differentiation					
US5795790	Cytotherapeutics, Inc.	X		X bioartifici al organ	X					
US5811274	The Regents of the University of Michigan	X			X					
US5827640	Biostore New Zealand	X			X					
US5834001	Brown University Research Foundation	X			X					
US5834196	Nexins Research B.V.	X			X					
US5834256	Cell Genesys, Inc.	X			X					
US 5879875	Biostore New Zealand	X			X					
US 5939319	Cobe Laboratories, Inc.	X			X					
US5951877	Cobe Laboratories, Inc.	X			X					
US 5955256	Baxter International Inc.	X			X					
US5958670	COBE Laboratories, Inc.	X			X					
US 5997860"	G. D. Searle & Co.	X EX VIVO			X					
US 5767074	Sloan-Kettering Institute for Cancer Research	X		X Compositi on of a ligand protein effective to expand hematopoi etic stem cells						
US5804431	The Regents of The University of Michigan	X								X
US5846796	The Picower Institute for Medical Research	X		X						
US 5879280	COBE Laboratories, Inc.	X								X
US6074874"	University of Pittsburgh					X	X embryonic stem cells			

Publication	Assignee	In vitro	In vivo	Compo- sition	Method of making		Cell type		Therapy	Device
Number				Sition		diagnostic use		origin		
US 6057489"	M.D. Anderson Cancer Center			X			X embryonic stem cell			
US6060642	The Regents of the University of California			X			X embryonic stem cell			
US 6090608	Yissum Research Development Company of the Hebrew University of Jerusalem Hadasit Medical Research Services and Development Company Limited			X			X bone marrow cells and peripheral blood stem cells	X bone marrow cells and peripheral blood		
US6091001	Abgenix, Inc. Japan Tobacco Inc.			X			X mouse embryonic stem cell			
US6096300	Advanced Research and Technology Institute						X bone marrow progenitor cell proliferation			
US6103530	Cytotherapeutics, Inc.			X			X mammalian neural stem cells			
US 6110209	Kevin R. Stone			X			X mesenchymal stem cells			
US6114598	Abgenix, Inc.			X			X mouse embryonic stem cell			
US 6124495	Beacon Laboratories, Inc.						X Cell type	X Bone marrow		
US5885962	Amgen Inc.			Totals						